



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,964	01/09/2002	Makoto Oka	SON-2320	4260

7590 10/05/2005
RADER, FISHMAN & GRAUER, P.L.L.C.
Suite 501
1233 20th Street, NW
Washington, DC 20036

EXAMINER

POWERS, WILLIAM S

ART UNIT PAPER NUMBER

2134

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/041,964

Applicant(s)

OKA ET AL.

Examiner

William S. Powers

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

AT

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 20, Reference character S257.
3. The drawings are objected to because Figures 21-24 each have multiple subfigures, but a letter does not denote each subfigure in the figures. Each subfigure must be denoted by a letter to lessen confusion.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 14 is objected to because of the following informality: the verb "selects" (page 81, line 24) does not agree with the noun "certificate authority" (page 81, line 24). Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 13, 22 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13, 22 and 35 are indefinite because it claims, "a plurality of signature algorithms are executed by each of said plurality of signature modules", whereas claims 1, 14 and 23 specify, "a plurality of signature modules each executing *a different signature algorithm*", emphasis added. The claims stand or fall with respect to the parent claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The subject matter of the claims is not tangible, it appears to be a computer program, per se.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5-6, 8-25, 27, 28 and 30-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,659,616 to Sudia in view of U.S. Patent No. 6,035,402 to Vaeth et al. (hereto referred to as Vaeth).

As to claims 1, 13, 14, 22, 23, 35 and 36, Sudia teaches a certificate authority (column 3, lines 35-47), a public key certificate (column 4, lines 39-42) and multiple signatures appended to the certificate, each signature conforming to its individual authorization certificate (column 9, lines 37-46) and the use of an X.500 Directory (column 6, line 59-column 7, line 25), but does not expressly mention a registration authority.

Vaeth teaches the use of a registration authority (column 8, lines 3-6) in order to verify data and data requirements for the public key certificate and issue the certificates described in Sudia.

Therefore, it would have be obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of Sudia with the registration

authority of Vaeth in order to verify data and data requirements for the public key certificate and issue the certificates described in Sudia.

As to claims 2, 3, 9, 15, 16, 17, 19, 20, 21, 24, 25 and 31, Sudia teaches the use of X.500 attributes that outline the requirements for a valid public key certificate that include multiple signatures appended to the certificate relevant to the attributes (column 9, line 23-column 10, line 20).

As to claim 5, 6, 8, 10, 11, 27, 28, 32 and 33, Sudia teaches particular signature requirements and restrictions to ensure validity of the signatures and the certificates (column 9, line 14-column 10, line 51).

As to claim 12 and 34, Sudia teaches a system where the sender uses a signature structure with a public/private key pair to sign a certificate (column 3, line 28-34).

As to claim, 18 and 30, Sudia teaches verification of signatures (column 9, lines 37-46).

8. Claims 4, 7, 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,659,616 to Sudia in view of U.S. Patent No. 6,035,402 to Vaeth et al. (hereto referred to as Vaeth) as applied to claims 1-3, 6, 14-16

and 23-25 above, and further in view of U.S. Patent No. 6,202,157 to Brownlie et al. (hereto referred to as Brownlie).

As to claims 4, 7, 26 and 29, Sudia teaches a public key certificate issuing system with multiple signatures and a signature structure that stores data about the signature (column 3, lines 23-34), but does not expressly mention the recording of the key length or other parameter information associated with those signatures.

Brownlie teaches the use of a central security policy data directory that stores parameters of the signatures including key length and allowable algorithms (column 3, lines 25-49) in order to "insure the integrity of [security] policies in the system" (column 3, lines 12-13).

Therefore, it would have be obvious to one of ordinary skill in the art at the time the invention was made to implement the invention of Sudia and Vaeth with the storing of data associated with the signatures of Brownlie in order to "insure the integrity of [security] policies in the system" (column 3, lines 12-13).

Conclusion

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William S. Powers, whose telephone number is (571)

Art Unit: 2134

272-8573. The examiner can normally be reached Monday-Thursday from 8 AM – 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached at (571) 272-3838.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
PO Box 1450
Alexandria, VA 22313-1450

Or faxed to:

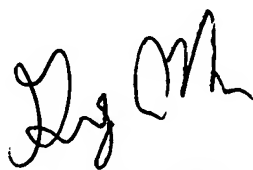
(571) 273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (886) 217-9197 (toll-free).

WSP
WSP

September 28, 2005


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100